

## TWO NEW HEMIPTERA FROM NEW SOUTH WALES.

By HERBERT M. HALE.

*(Communicated by A. J. Nicholson, M.Sc.)*

(Plates xlvii.-xlviii.)

[Read 26th November, 1924.]

A Notonectid for which it is necessary to erect a new genus, and a Saldid from the Blue Mountains, are herein dealt with. These two species were included in a series of aquatic and semi-aquatic Hemiptera taken in New South Wales by Mr. A. J. Nicholson, to whom I am indebted for the opportunity of examining these bugs.

Family NOTONECTIDAE.

Subfamily NOTONECTINAE.

The backswimmer is of special interest for, although only a few specimens were taken, two distinct forms are represented. The one is a melanochroic form with completely developed hemelytra and metathoracic wings, and a large scutellum. The other variety is degenerate; the dorsum is largely luteous, the hemelytra are for the most part devoid of pigment, show no trace of claval or membranous suture, and have a greatly reduced "membrane," while metathoracic wings are entirely wanting and the scutellum is very small.

The absence, or partial abortion, of the metawings, accompanied by an imperfect development of the hemelytra, occurs in several other Cryptocerate genera. For instance, all specimens of a large series of *Sphaerodema rusticum* collected at Murray Bridge, South Australia, have a stunted hemelytral membrane, and non-functional alae; these were taken from permanent water. Some individuals of the semi-aquatic *Matinus* have well-developed alae and hemelytra; others have a small hemelytral membrane and no metawings. A backswimmer recently described by me (Mjöberg's Swed. Sci. Exped. Aust.) belongs to the genus *Nychia*, but the wings and hemelytra are normal and well developed, unlike the condition described for the genus. Dr. Hungerford (1919, 178) mentions that the American *Plea striola* usually has aborted alae, but that apparently they are occasionally developed; the Neotropical Corixid genus *Palmaacorixa* is said to have aborted metawings, but the same author (1919, p. 212 and 224) adds that they are sometimes present. Therefore, it seems that, in the case of the Cryptocerate bugs, the more or less constant degeneration of the wings in certain species cannot in itself be regarded as a character of much taxonomic value. Nevertheless, it is of interest in that it indicates a tendency to further specialization of insects already much modified for an aquatic habit.

## TWO NEW HEMIPTERA FROM NEW SOUTH WALES.

By HERBERT M. HALE.

*(Communicated by A. J. Nicholson, M.Sc.)*

(Plates xlvii.-xlviii.)

[Read 26th November, 1924.]

A Notonectid for which it is necessary to erect a new genus, and a Saldid from the Blue Mountains, are herein dealt with. These two species were included in a series of aquatic and semi-aquatic Hemiptera taken in New South Wales by Mr. A. J. Nicholson, to whom I am indebted for the opportunity of examining these bugs.

Family NOTONECTIDAE.

Subfamily NOTONECTINAE.

The backswimmer is of special interest for, although only a few specimens were taken, two distinct forms are represented. The one is a melanochroic form with completely developed hemelytra and metathoracic wings, and a large scutellum. The other variety is degenerate; the dorsum is largely luteous, the hemelytra are for the most part devoid of pigment, show no trace of claval or membranous suture, and have a greatly reduced "membrane," while metathoracic wings are entirely wanting and the scutellum is very small.

The absence, or partial abortion, of the metawings, accompanied by an imperfect development of the hemelytra, occurs in several other Cryptocerate genera. For instance, all specimens of a large series of *Sphaerodema rusticum* collected at Murray Bridge, South Australia, have a stunted hemelytral membrane, and non-functional alae; these were taken from permanent water. Some individuals of the semi-aquatic *Matinus* have well-developed alae and hemelytra; others have a small hemelytral membrane and no metawings. A backswimmer recently described by me (Mjöberg's Swed. Sci. Exped. Aust.) belongs to the genus *Nychia*, but the wings and hemelytra are normal and well developed, unlike the condition described for the genus. Dr. Hungerford (1919, 178) mentions that the American *Plea striola* usually has aborted alae, but that apparently they are occasionally developed; the Neotropical Corixid genus *Palmaacorixa* is said to have aborted metawings, but the same author (1919, p. 212 and 224) adds that they are sometimes present. Therefore, it seems that, in the case of the Cryptocerate bugs, the more or less constant degeneration of the wings in certain species cannot in itself be regarded as a character of much taxonomic value. Nevertheless, it is of interest in that it indicates a tendency to further specialization of insects already much modified for an aquatic habit.